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RAW SEQUENCE LISTING

DATE: 01/08/2003

PATENT APPLICATION: US/09/884,319 TIME: 10:30:11

Input Set : N:\Crf3\RULE60\09884319.raw Output Set: N:\CRF4\01082003\1884319.raw

SEQUENCE LISTING

```
(1) GENERAL INFORMATION:
             (i) APPLICANT: Lin, Lih-Ling
      6
                            Graham, James
      8
            (ii) TITLE OF INVENTION: NOVEL INTERLEUKIN-1 RECEPTOR
      9
                                      INTRACELLULAR LIGAND PROTEINS AND INHIBITORS OF LIGAND
     10
           (iii) NUMBER OF SEQUENCES: 7
     12
            (iv) CORRESPONDENCE ADDRESS:
     14
                  (A) ADDRESSEE: LEGAL AFFAIRS, GENETICS INSTITUTE, INC.
     15
     16
                  (B) STREET: 87 CambridgePark Drive
                  (C) CITY: Cambridge
     17
                                                               ENTERED
     18
                  (D) STATE: MA
     19
                  (E) COUNTRY: USA
     20
                  (F) ZIP: 02140
     22
             (v) COMPUTER READABLE FORM:
     23
                  (A) MEDIUM TYPE: Floppy disk
     24
                  (B) COMPUTER: IBM PC compatible
     25
                  (C) OPERATING SYSTEM: PC-DOS/MS-DOS
                  (D) SOFTWARE: PatentIn Release #1.0, Version #1.25
     26
     28
            (vi) CURRENT APPLICATION DATA:
C--> 29
                  (A) APPLICATION NUMBER: US/09/884,319
C--> 30
                  (B) FILING DATE: 18-Jun-2001
     31
                  (C) CLASSIFICATION:
           (vii) PRIOR APPLICATION DATA:
     33
W--> 34
                  (A) APPLICATION NUMBER: US/09/083,516
     35
                  (B) FILING DATE:
W--> 37
                  (A) APPLICATION NUMBER: 08/487,942
     38
                  (B) FILING DATE:
     40
          (viii) ATTORNEY/AGENT INFORMATION:
     41
                  (A) NAME: Brown, Scott A.
                  (B) REGISTRATION NUMBER: 32,724
     42
     43
                  (C) REFERENCE/DOCKET NUMBER: GI5258
     45
            (ix) TELECOMMUNICATION INFORMATION:
     46
                  (A) TELEPHONE: (617) 498-8224
     47
                  (B) TELEFAX: (617) 876-5851
     50 (2) INFORMATION FOR SEQ ID NO: 1:
             (i) SEQUENCE CHARACTERISTICS:
     53
                  (A) LENGTH: 1571 base pairs
                  (B) TYPE: nucleic acid
     54
     55
                  (C) STRANDEDNESS: double
     56
                  (D) TOPOLOGY: linear
    58
            (ii) MOLECULE TYPE: cDNA
```

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Input Set : N:\Crf3\RULE60\09884319.raw Output Set: N:\CRF4\01082003\I884319.raw

60 63				POTHI ATURI	ETICA	L: 1	10										
64																	
	65 (B) LOCATION: 2529 68 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:																
68	C 7.0												C III	-m -C7			4.0
71					rg ga al As												46
72	1,1	1	LOA	Lg va	al AS	ър ье 5	eu Ai	.y va	11 TE		LII AS LO	sp c	ys C	/S G.		.5	
	ጥርጥ	_	ACC	ΔGG	GGG	-	ጥጥር	יי מ מ	GCC			ጥልጥ	СУТ	ጥጥር	_	_	94
																	24
	75 Cys Arg Thr Arg Gly Gln Phe Asn Ala Phe Ser Tyr His Phe Arg Gly 76 20 25 30																
	AGA	CGG	TCT	CTT	GAG	TTC	AGC	TAC	CAG		GAC	AAG	CCG	ACC		AAA	142
					Glu												
80	-	_		35				-	40		-	-		45	-	_	
82	ACA	AGA	CCA	CGG	AAA	ATA	CCC	AGT	GTT	GGG	AGA	CAG	GGG	GAA	CAT	CTC	190
83	Thr	Arg	Pro	Arg	Lys	Ile	Pro	Ser	Val	Gly	Arg	Gln	Gly	Glu	His	Leu	
84			50					55					60				
86	AGC	AAC	AGC	ACC	TCA	GCC	TTC	AGC	ACA	CGC	TCA	GAT	GCA	TCT	GGG	ACA	238
87	Ser	Asn	Ser	Thr	Ser	Ala	Phe	Ser	Thr	Arg	Ser	Asp	Ala	Ser	Gly	Thr	
88		65					70					75					
					GAG												286
		Asp	Phe	Arg	Glu		Val	Leu	Glu	Met		Lys	Thr	Ile	Thr	_	
92	80	7 (7	7 (7	CAC	א מט א	85	71.71.71	Cmm	C A A	m C 7	90	CITIC	7. C.M	7.00	7.07	95 CAC	224
					ATA												334
96	ьeu	Arg	Inr	GTII	Ile 100	ьуѕ	ьуs	ьeu	GIU	105	Arg	Leu	ser	Thr	110	GIU	
	ፕርር	СТС	СΣΤ	GCC	GGG	GGC	GDD	тСт	$C\Delta C$		ממכ	ם מ מ	DCC	ΔΔα		Δ Δ Δ	382
					Gly												302
100			тор	115		OL y	OLU	001	120		11011	11011	1111	125	_	LyS	
102	AAA	A GAT	r GC <i>I</i>			ATT	TGT	' GAA			A GAC	GGG	CAC	GTC	ACC	TGC	430
																Cys	
104	_	-	130	_			-	135	_	-	-	-	140			-	
106	5 TTC	GTO	GAA	A GCT	TGC	CCC	CCI	GCC	ACC	TGT	GC1	GTC	CCC	GTG	: AAC	ATC	478
107	7 Phe	e Val	l Glu	ı Ala	Cys	Pro	Pro	Ala	a Thr	Cys	: Ala	a Val	Pro	Val	. Asn	Ile	
.108		145					150					155					
																AAG	526
			Ala	a Cys	Cys			. Cys	s Let	ı Glr	_		y Ala	Glu	ı Glu	Lys	
	160				0070	165					170				~~ ~	175	570
	_		GCTC	CCTG	GGAG	GCTC	CT C	CAGAG	STTTC	ST CI	'GCT'	FTGCC	CATC	GTGA	GAT	·	57,9
	Pro		ccc	אשככ	CACC	C7 C	· CTI CC	CCAC	יייי ככ	יזראר	-CACC	י תר	CACC	CAC	א א כית	CGTGAC	639
																CAACCA	699
																TCCTAG	759
																TGCTAC	819
																CACCAT	879
																GCCAGG	939
																CTCACC	999
														•		ACGGAA	1059
																CCCCCG	1119

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Input Set : N:\Crf3\RULE60\09884319.raw
Output Set: N:\CRF4\01082003\1884319.raw

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136 GCCTCTTCCC TGGGAACCTC TGAACTCCTC CTTCCTCTGG GCTCTCTGTA ACATTTCACC
138 ACACGTCAGC ATCTAATCCC AAGACAACA TTCCCGCTGC TCGAAGCAGC TGTATAGCCT
                                                                     1239
140 GTGACTCTCC GTGTGTCAGC TCCTTCCACA CCTGATTAGA ACATTCATAA GCCACATTTA
                                                                     1299
142 GAAACAGGTT TGCTTTCAGC TGTCACTTGC ACACATACTG CCTAGTTGTG AACCAAATGT
                                                                     1359
144 GAAAAAACCT CCTTCATCCC ATTGTGTATC TGATACCTGC CGAGGGCCAA GGGTGTGTGT
                                                                     1419
146 TGACAACGCC GCTCCCAGCC GGCCCTGGTT GCGTCCACGT CCTGAACAAG AGCCGCTTCC
148 GGATGGCTCT TCCCAAGGGA GGAGGAGCTC AAGTGTCGGG AACTGTCTAA CTTCAGGTTG
                                                                     1539
                                                                     1571
153 (2) INFORMATION FOR SEQ ID NO: 2:
       (i) SEQUENCE CHARACTERISTICS:
             (A) LENGTH: 176 amino acids
157
             (B) TYPE: amino acid
158
             (D) TOPOLOGY: linear
160
       (ii) MOLECULE TYPE: protein
       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
164 Ile Pro Arg Val Asp Leu Arg Val Trp Gln Asp Cys Cys Glu Asp Cys
                                      10
167 Arg Thr Arg Gly Gln Phe Asn Ala Phe Ser Tyr His Phe Arg Gly Arg
               20
170 Arg Ser Leu Glu Phe Ser Tyr Gln Glu Asp Lys Pro Thr Lys Lys Thr
                               40
173 Arg Pro Arg Lys Ile Pro Ser Val Gly Arg Gln Gly Glu His Leu Ser
                           55
176 Asn Ser Thr Ser Ala Phe Ser Thr Arg Ser Asp Ala Ser Gly Thr Asn
                      70
179 Asp Phe Arg Glu Phe Val Leu Glu Met Gln Lys Thr Ile Thr Asp Leu
                   85
                                      90
182 Arg Thr Gln Ile Lys Lys Leu Glu Ser Arg Leu Ser Thr Thr Glu Cys
    100
                                  105
185 Val Asp Ala Gly Gly Glu Ser His Ala Asn Asn Thr Lys Trp Lys Lys
186 115
                              120
                                                 125
188 Asp Ala Cys Thr Ile Cys Glu Cys Lys Asp Gly Gln Val Thr Cys Phe
                         135
                                             140
191 Val Glu Ala Cys Pro Pro Ala Thr Cys Ala Val Pro Val Asn Ile Pro
                                         155
192 145
                      150
194 Gly Ala Cys Cys Pro Val Cys Leu Gln Lys Arg Ala Glu Glu Lys Pro
                                      170
                  165
198 (2) INFORMATION FOR SEQ ID NO: 3:
       (i) SEQUENCE CHARACTERISTICS:
200
201
            (A) LENGTH: 1088 base pairs
             (B) TYPE: nucleic acid
202
             (C) STRANDEDNESS: double
203
             (D) TOPOLOGY: linear
204
       (ii) MOLECULE TYPE: cDNA
206
      (iii) HYPOTHETICAL: NO
208
       (ix) FEATURE:
211
212
             (A) NAME/KEY: CDS
213
             (B) LOCATION: 2...961
216
     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
```

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Input Set : N:\Crf3\RULE60\09884319.raw
Output Set: N:\CRF4\01082003\1884319.raw

218 219	_					ys Tl		AA CA Lu G		sp G	ly Ty				co Th	nr	46
220		1				5					10					L5	
								CCC									94
223 224	Asn	Lys	His	Phe	Thr 20	Gln	Ser	Pro	Lys	Lys 25	Ser	Val	Ala	Asp	Leu 30	Leu	
	GGG	TCC	TTT	GAA	GGC	AAA	CGA	AGA	CTC	CTT	CTG	ATC	ACT	GCT	CCC	AAG	142
227	Gly	Ser	Phe	Glu	Gly	Lys	Arq	Arg	Leu	Leu	Leu	Ile	Thr	Ala	Pro	Lys	
228	_			35	_	-	_	_	40					45		_	
230	GCT	GAG	AAC	AAT	ATG	TAT	GTG	CAA	CAA	CGT	GAT	GAA	TAT	CTG	GAA	AGT	190
								Gln									
232			50			•		55		_	-		60				
234	TTC	TGC	AAG	ATG	GCT	ACC	AGG	AAA	ATC	TCT	GTG	ATC	ACC	ATC	TTC	GGC	238
235	Phe	Cys	Lys	Met	Ala	Thr	Arg	Lys	Ile	Ser	Val	Ile	Thr	Ile	Phe	Gly	
236		- 65	_				70					75					
238	CCT	GTC	AAC	AAC	AGC	ACC	ATG	AAA	ATC	GAC	CAC	TTT	CAG	CTA	GAT	AAT	286
239	Pro	Val	Asn	Asn	Ser	Thr	Met	Lys	Ile	Asp	His	Phe	Gln	Leu	Asp	Asn	
240	80					85					90					95	
242	GAG	AAG	CCC	ATG	CGA	GTG	GTG	GAT	GAT	GAA	GAC	TTG	GTA	GAC	CAG	CGT	334
243	Glu	Lys	Pro	Met	Arg	Val	Val	Asp	Asp	Glu	Asp	Leu	Val	Asp	Gln	Arg	
244		_			100)				105					110		
246	CTC	ATC	AGC	GAG	CTG	AGG	AAA	GAG	TAC	GGA	ATG	ACC	TAC	AAT	GAC	TTC	382
247	Leu	Ile	Ser	Glu	Leu	Arg	Lys	Glu	Tyr	Gly	Met	Thr	Tyr	Asn	Asp	Phe	
248				115					120					125			
250	TTC	ATG	GTG	CTA	ACA	GAT	GTG	GAT	CTG	AGA	GTC	AAG	CAA	TAC	TAT	GAG	430
251	Phe	Met	Val	Leu	Thr	Asp	Val	Asp	Leu	Arg	Val	Lys	Gln	Tyr	Tyr	Glu	
252			130					135					140				
254	GTA	CCA	ATA	ACA	ATG	AAG	TCT	GTG	TTT	GAT	CTG	ATC	GAT	ACT	TTC	CAG	478
255	Val	Pro	Ile	Thr	Met	Lys	Ser	Val	Phe	Asp	Leu	Ile	Asp	Thr	Phe	Gln	
256		145					150					155					
								AAG									526
259	Ser	Arg	Ile	Lys	Asp		Glu	Lys	Gln	Lys		Glu	Gly	Ile	Val		
	160					165					170					175	
								TTA									574
	Lys	Glu	Glu	Val	_	Gly	Val	Leu	Glu		Phe	Pro	Ile	Asn		Ser	
264					180					185			~~		190		600
								GTA									622
	Ser	Val	Val		Arg	GLu	Asp	Val		Ala	Hıs	Leu	Val		Asp	TIE	
268	~~~			195	~~~	0.00	7.00	000	200	m 7. C	mmo	mc0	7 M.C	205	C III T	СШС	670
								CCG									670
	Arg	Asn	_	Phe	GIn	vaı	Ser	Pro	GIu	Tyr	Phe	Ser		ьeu	ьeu	vaı	
272	007	70 70 70	210	CC7	70.70.00	CMC	71 71 71	215	mcc	m /s mi	CCI	mcc.	220	71 171 (mcc	mcc	710
								TCC									718
	СТУ	-	Asp	GTÀ	ASI	vaı		Ser	rrp	ıyı	PIO		PIO	мес	пр	ser	
276	7 000	225	7 1010	CMC	መልረ	CIM	230	7 000	C 71 m	TICC.	אישיכי	235	Cmm	CCC	$\Lambda \subset \Lambda$	CAC	766
								ATT									700
		val	тте	var	TAT	245	теп	Ile	изр	Ser	250	GTH	neu	Ary	Ary	255	
	240	7 m.C	CCC	Λωπ	C Λ C		тсл	CTG	CCC	አ ጥ 🔿		ጥርር	CAC	7) / C	ΔTC		814
202	GAA	AIG	GCG	WII	CAG	CAG	ICA	CIG	GGG	MIG	CGC	160	CAG	AAG	MIG	VGI	014

RAW SEQUENCE LISTING DATE: 01/08/2003 PATENT APPLICATION: US/09/884,319 TIME: 10:30:11

Input Set : N:\Crf3\RULE60\09884319.raw
Output Set: N:\CRF4\01082003\I884319.raw

OCC CL Mat The The Charles Com Low Clay Mat They Care Charles Mot Com												
283 Glu Met Ala Ile Gln Gln Ser Leu Gly Met Arg Cys Gln Lys Met Ser 284 260 265 270												
284 260 265 270 286 ATG CAG GCT ATG GTT ACC ATA GTT ACC ACC AAG GAT ACC AGG ATG GTT	862											
287 Met Gln Ala Met Val Thr Ile Val Thr Thr Lys Asp Thr Arg Met Val 288 275 280 285												
	910											
290 ACC AGG ATG ACT ACC GTC ATC ATG AGA GTT ATC ACC ATG GAT ACC CTT												
291 Thr Arg Met Thr Thr Val Ile Met Arg Val Ile Thr Met Asp Thr Leu												
292 290 295 300	958											
294 ACT GAG CAG AAA TAT GTA ACC TTA GAC TCA GCC AGT TTC CTC TGC AGC												
295 Thr Glu Gln Lys Tyr Val Thr Leu Asp Ser Ala Ser Phe Leu Cys Ser												
296 305 310 315	1011											
298 TGC TAAAACTACA TGTGGCCAGC TCCATTCTTC CACACTGCGT ACTACATTTC												
299 Cys												
300 320	77 1071											
302 CTGCCTTTTT CTTTCAGTGT TTTTCTAAGA CTAAATAAAT AGCAAACTTT CACCTAAA												
304 AAAAAAAA AAAAAAA	1088											
307 (2) INFORMATION FOR SEQ ID NO: 4:												
309 (i) SEQUENCE CHARACTERISTICS:												
310 (A) LENGTH: 320 amino acids												
311 (B) TYPE: amino acid												
312 (D) TOPOLOGY: linear												
314 (ii) MOLECULE TYPE: protein												
316 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:												
318 Lys Lys Gly Gly Lys Thr Glu Gln Asp Gly Tyr Gln Lys Pro Thr Asn												
319 1 5 10 15 15 15 20 15 15 15 15 15 15 15 15 15 15 15 15 15												
321 Lys His Phe Thr Gln Ser Pro Lys Lys Ser Val Ala Asp Leu Gly												
322 20 25 30 224 3 Pl 31 31 1 2 Pun												
324 Ser Phe Glu Gly Lys Arg Arg Leu Leu Ile Thr Ala Pro Lys Ala												
325 35 40 45												
327 Glu Asn Asn Met Tyr Val Gln Gln Arg Asp Glu Tyr Leu Glu Ser Phe 328 50 60												
330 Cys Lys Met Ala Thr Arg Lys Ile Ser Val Ile Thr Ile Phe Gly Pro 331 65 70 75 80												
333 Val Asn Asn Ser Thr Met Lys Ile Asp His Phe Gln Leu Asp Asn Glu 334 85 90 95												

336 Lys Pro Met Arg Val Val Asp Asp Glu Asp Leu Val Asp Gln Arg Leu 337 100 105 110												
339 Ile Ser Glu Leu Arg Lys Glu Tyr Gly Met Thr Tyr Asn Asp Phe Phe												
340 115 120 125 342 Met Val Leu Thr Asp Val Asp Leu Arg Val Lys Gln Tyr Tyr Glu Val												
342 Met val Leu ini Asp val Asp Leu Arg val Lys Gin Tyl Tyl Giu val 343 130 135 140												
345 Pro Ile Thr Met Lys Ser Val Phe Asp Leu Ile Asp Thr Phe Gln Ser												
346 145 150 155 160												
348 Arg Ile Lys Asp Met Glu Lys Gln Lys Lys Glu Gly Ile Val Cys Lys												
349 165 170 175												
351 Glu Glu Val Gly Gly Val Leu Glu Leu Phe Pro Ile Asn Gly Ser Ser												
351 Gid Gid Val Gly Gly Val Led Gid Led File Flo Tie Asii Gly Sel												
354 Val Val Glu Arg Glu Asp Val Pro Ala His Leu Val Lys Asp Ile Arg												
355 195 200 205												
200 200												

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/884,319

DATE: 01/08/2003

TIME: 10:30:12

Input Set : N:\Crf3\RULE60\09884319.raw
Output Set: N:\CRF4\01082003\1884319.raw

L:29 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]

L:30 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]

L:37 M:238 W: Alpha Fields not Ordered, Reordered [(A) APPLICATION NUMBER:] of (1)(vii)